

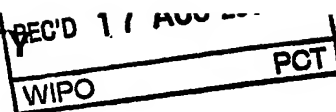
PATENT COOPERATION TREATY



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference J00045547WO	FOR FURTHER ACTION See Form PCT/PEA/416	
International application No. PCT/GB2004/002433	International filing date (day/month/year) 09.06.2004	Priority date (day/month/year) 09.06.2003
International Patent Classification (IPC) or national classification and IPC G11B20/00, G06F1/00		
Applicant FIRST 4 INTERNET LTD et al		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 12 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (Indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input checked="" type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 07.01.2005	Date of completion of this report 16.08.2005	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Gil Zamorano, A Telephone No. +49 89 2399-7629 	

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/002433

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-13 as originally filed

Claims, Numbers

6-50 as originally filed

1-5 received on 28.04.2005 with letter of 27.04.2005

Drawings, Sheets

1/4-4/4 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/002433

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees, the applicant has:
- ☐ restricted the claims.
 - ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos. .

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,4-6,8-15,20,22-24,26-35, 39-50
	No: Claims	1,3,7,16-19,21,25,36-38
Inventive step (IS)	Yes: Claims	4-6,22-24, 43-50
	No: Claims	1-3,7-21,25-38, 39-42
Industrial applicability (IA)	Yes: Claims	1-50
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item IV.

The separate inventions/groups of inventions are (please notice that the number of inventions is different as in the previous partial search report and corresponding Form 237; nevertheless, the applicant will not be invited to pay additional **search** fees again):

1-38

Compact disc carrying a session containing at least one track with a data portion located at the track start position and arranged to cause a first compact disc reader to fail to read the track due to the fact that the actual start position is different from the indicated start position. The session further includes an index arranged to be used by a second compact disc reader to determine the actual start position and enable the second compact disc reader to read the track.

39-42

Compact disc carrying a session containing at least one track, which includes an index arranged to be used by a first compact disc reader to determine the actual start position independently of the table of contents. The session further includes a section which causes a second compact disc reader to execute a player program so as to enable the second compact disc reader to read the track.

43-50

Restricting access to data in a removable storage medium in a removable storage device connected to the computer by intercepting a command sent by an application running on the computer and preventing standard commands from being interpreted correctly, and converting non-standard commands to standard commands for sending them to the device.

They are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:

Comparison of group I and group II

a) The common features linking independent claim 1 and independent claim 39 are:

A compact disc carrying a session containing at least one track which includes an index arranged to be used by a determined type of compact disc reader to read the track.

b) This feature is well known in the art. This feature is e.g. known from XP001150484 "SUPER VIDEO CD SVCD SYSTEM SPECIFICATION", see the chapter 6.2.3 SVCD Directory.

c) The remaining features of claim 1 are:

a data portion located at the track start position and arranged to cause a first compact disc reader to fail to read the track due to the fact that the actual start position is different from the indicated start position.

These feature relate to the problem of how to prevent certain type of compact disc reader of reading a compact disc.

d) The remaining features of claim 39 are:

a section which causes a second compact disc reader to execute a player program so as to enable the second compact disc reader to read the track.

These feature relate to the problem of how to prevent the copying of a compact disc by certain type of compact disc readers.

e) The problem solved by claim 1 and the problem solved by claim 6 are different, as so are the distinguishing features.

Therefore group I and group II relate to different inventions, which are not linked as to form a single general inventive concept according to Rule 13.1 PCT. As a conclusion, there is a lack of unity within the meaning of Article 17(3)(a) PCT and Rule 13.1 PCT between groups of claims I and II.

Comparison of group I and group III

a) The common features linking independent claim 1 (or claim 19) and independent claim 43 are:

Restricting of access to data on a removable storage medium.

b) This feature is well known in the prior art. This feature is e.g. known from WO 01/80546 (see abstract)

c) Although both groups of claims provide for the restriction of access to removable storage medium, each one of the steps followed by the different procedures have completely different technical effects as they, in conclusion, solve a general problem in two alternative ways. The first considers formatting the source data when manufacturing the storage medium in such a way that the access to the medium can be enabled or inhibited for different type of readers, while in the second, commands sent by applications running in a computer to the storage medium are intercepted, examined and then blocked or admitted depending on some criteria.

Therefore group I and group III relate to different inventions, which are not linked as to form a single general inventive concept according to Rule 13.1 PCT. As a conclusion, there is a lack of unity within the meaning of Article 17(3)(a) PCT and Rule 13.1 PCT between groups of claims I and III.

Comparison of group II and group III

a) The common features linking independent claim 39 (or claim 40) and independent claim 43 are also:

Restricting of access to data on a removable storage medium.

b) This feature is well known in the prior art. This feature is e.g. known from WO 01/80546 (see abstract)

c) Although both groups of claims provide for the restriction of access to removable storage medium, each one of the steps followed by the different procedures have completely different technical effects as they, in conclusion, solve a general problem in two alternative ways. The first considers formatting the source data when manufacturing the storage medium in such a way that the access to the medium can be enabled or inhibited for different type of readers, while in the second, commands sent by applications running in a computer to the storage medium are intercepted, examined and then blocked or admitted depending on some criteria.

Therefore group II and group III relate to different inventions, which are not linked as to form a single general inventive concept according to Rule 13.1 PCT. As a conclusion, there is a lack of unity within the meaning of Article 17(3)(a) PCT and Rule 13.1 PCT between groups of claims II and III.

Re Item V.

- 1 The following documents are referred to in this communication:
D1 : WO 01/80546 A (ALCALAY RAN ; MIDBAR TECH LTD (IL); SELVE PHILIPPE (IL); SINQUIN PATRI) 25 October 2001 (2001-10-25)
D2: "SUPER VIDEO CD SVCD SYSTEM SPECIFICATION" SVCD SYSTEM SPECIFICATION, XX, XX, November 1998 (1998-11), pages 1-86, XP001150484
D3: WO 01/46952 A (LOCKSTREAM CORP) 28 June 2001 (2001-06-28)
D4: "CACTUS DATA SHIELD 200" INTERNET, 26 January 2002 (2002-01-26), XP002261887

FIRST GROUP OF INVENTIONS

2 INDEPENDENT CLAIM 1

- 2.1 Firstly it is noted that a reference sign in a claim put in brackets after a corresponding feature has the only aim of increasing the intelligibility of the a claim, without limiting the scope.

Secondly it is noted that feature b. "the track is located at an actual start position (T2) different from said indicated start position (T1)" has at least two possible interpretations. One interpretation could be that the start time of the track is altered and thereby the track that would normally start at a time (T1) will now start at a different time (T2). A second interpretation could be that start time of the track is NOT altered, but if the absolute or relative track times are corrupted, the track would start at another time (T2) other than the indicated by the timing information (T1) contained in the Q-Channel. This distortions of the absolute time (the second interpretation) are disclosed by D1.

As a consequence, the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1** is not new in the sense of Article 33(2) PCT.

Document **D1** discloses a compact disc carrying a session including a table of contents and a program area containing at least one track, the table of contents indicating a track start position (fig.3; pg.11, l.6-17); characterised in that:

- a. a data portion is located at said indicated track start position and is arranged to cause a first compact disc reader which uses the indicated track start position to determine the location of said track to fail to read the track (pg.3, l.4-13);
- b. the track is located at an actual start position different from said indicated start position (pg.3, l.14-18); and
- c. the session further includes an index arranged to be used by a second compact disc reader to determine the actual start position and to enable the second compact disc player to read the track (pg.3, l.19-22).

3 INDEPENDENT CLAIM 19

- 3.1** The subject matter independent **claim 19** corresponds in terms of procedural features to that of claim 1. The objections raised in respect of this latter claim; therefore, also apply, mutatis mutandis, to independent claim 19, which is thus not allowable under Article 33(1) PCT for lack of novelty of its subject matter, Article 33(2) PCT.

4 INDEPENDENT CLAIM 38

- 4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 38** is not new in the sense of Article 33(2) PCT. Obviously, a computer program including program steps for performing a known method is also not allowable.

5 DEPENDENT CLAIMS 2, 3, 7-18, 20, 21, 25-32, 36, 37

Dependent claims 2, 3, 7-18, 20, 21, 25-32, 36, 37 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

- 5.1 The supplementary feature of **claim 2** is not considered to be inventive. Even though the compact disc of D1 is not prepared to be read by a VCD compatible compact disc readers, the skilled person would certainly add an index section containing the mandatory files (see e.g. D2 "SVCD system specification", fig.5c) info and entries to comply to the video CD standard.
- 5.2 The additional features of **claims 3 and 7** are known from D1. In D1 the index is located in the reserved bits of the subcode channels (pg.3, l.19-20) and the unrecoverable data causes a read error in the first reader (pg.3, l.8-10).
- 5.3 The additional features of **claims 8-15** specify the inclusion of a player or supervisory program included in the CD and being started by accessing it by means of a pointer or by an auto-run mechanism by the boot sector in order to prevent the copying of the CD. However, these features have already been employed for the same purpose in a similar compact disc, see document **D3**, pages 3 - 6. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a compact disc according to document D1, thereby achieving the copy protection according to these claims.
- 5.4 **Claims 16-18, 36 and 37** apparently do not add anything of inventive significance to

the claims to which they refer. **Claims 20, 21, and 25-35** correspond to the features of claims 2, 3, and 7-18, therefore the opinion also applies for these claims.

6 DEPENDENT CLAIMS 4-6, 22-24

The combination of the features of dependent claims 4-6, 22-24 are neither known from, nor rendered obvious by, the available prior art. The reasons are as follows:

One or more of the subchannels (e.g. P-channel) is used by a third compact disc reader, in particular an audio CD player, to find the correct start position and perform the de-encapsulation. This is apparently not known or rendered obvious by the cited prior art.

SECOND GROUP OF INVENTIONS

7 INDEPENDENT CLAIMS 39-42

7.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 39-42 does not involve an inventive step in the sense of Article 33(3) PCT.

7.2 **D2** discloses a compact disc carrying a session including a table of contents and a program area containing at least one track (section 5.5);

Moreover, claim 39 specifies that the compact disc is characterised in that:

- a. the session further includes an index arranged to be used by a first compact disc reader to determine the actual start position of at least one track independently of the table of contents.
- b. the compact disc further carries a section which causes a second compact disc reader to execute a player program when the compact disc is loaded in the second compact disc reader so as to enable the second compact disc reader to read at least one track.

There is apparently no technical effect achieved by all the distinguishing features taken in combination, but rather a plurality of "partial problems" which are independently solved by different sets of distinguishing features. In particular set of features **a.**, which enable a first compact disc reader to read the data, is disclosed by D2 (section 5.3); in the same way, set of features **b.**, which enable a second compact disc reader to read the data, is disclosed by D3 (pg.4, l.12 - pg.5, l.7).

Thus, claim 39 actually seeks protection for a system including in fact a combination of "two inventions", i.e. a index to be used by a first compact disc reader and a section which causes a second compact disc reader to execute a player program, both of them being however well known per se from the prior art. The subject-matter of claim 39, therefore, consists merely in the juxtaposition or association of both known and common measures functioning in their normal way and not producing any non-obvious working interrelationship. The combined features do not mutually support each other in their effects to such an extent that any unexpected or surprisingly advantageous result is achieved. (Please refer fo PCT/GL, 13.05 and 13.14(c))

The subject-matter of **claim 39** does not therefore involve an inventive step and hence claim 39 do not meet the requirements of Articles 33(1) and 33(3) EPC.

- 7.3 The subject matter independent **claim 40** corresponds in terms of procedural steps to that of claim 39. The objections raised in respect of this latter claim; therefore, also apply, mutatis mutandis, to independent claim 40, which is thus does not meet the requirements of Article 33(1) EPC for lack of inventive step of its subject matter, Article 33(3) EPC.
- 7.4 The subject-matter of independent **claims 41 and 42** appear to be a mere generalization or simplification of the subject-matter of claims 39 and 40, respectively. Obviously all of the features are disclosed in the combination of D2 and D3 in the same way as in these latter claims; thus subject-matter of claims 41 and 42 does not involve an inventive step and do not meet the requirements of Articles 33(1) and 33(3) EPC.

THIRD GROUP OF INVENTIONS

- 8 The invention according to **claim 43** relates to a method of restricting access to data in a removable storage medium in a removable storage device connected to the computer by intercepting a command sent by an application running on the computer, preventing standard commands from being interpreted correctly, and converting non-standard commands to standard commands for sending them to the device.

None of the available prior art discloses or renders obvious the subject-matter claimed. The document **D3** cited in this paper discloses a method of restricting access to data on a disc, comprising an application or program designed to automatically run upon insertion of the disc. The program is designed to prevent access to content on the computer, for example by other programs running on the device, except as permitted by the program. This is accomplished by unmounting the optical disc, such that the access to the content is controlled by the program (page 4). Nevertheless, the unmounting the disc does not necessarily imply that intercepted commands are interpreted, and standard commands are blocked and non-standard command are converted to standard commands to be sent to the device. Document **D4** discloses (pages 4-5) a CD containing 5 files in a second session, which permits music to be played back, but impedes the possibility of ripping the CD in the HD. In this case, also some of the essential features of the invention are clearly missing. Therefore, the subject-matter of claim 43 involves an inventive step in the light of Article 33(3).

Dependent **claims 44-47** relate to preferred embodiments of the invention. Hence these claims also meet the requirements of Article 33(2)-(4) PCT.

The subject-matter of independent **claims 48-50**, this is, a computer program performing the inventive steps of the method of claims 43-47 and the compact disc carrying the computer program, is also new and inventive for the same reasons.